

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-2. Cancelled.

3. (Currently Amended) A network switch for receiving data packets including header portions and for selectively forwarding said data packets, said switch comprising:

a register for receiving a header portion of a packet;

a look-up engine operative to obtain associated data in response to the header portion, wherein said associated data includes a ~~provisional~~ initial port bitmask; and

a network processor which is operative to perform a processing function in response to at least one of said header portion and said associated data,

said network processor executing said processing function to cause modification of said ~~provisional~~ initial port bitmask,

wherein said look-up engine provides for said network processor a first indication, said first indication indicating that said associated data has been obtained; and

said network processor is operative in response to said first indication to execute said processing function and to provide to said look-up engine a second indication, said second indication indicating that said function has been executed.

4. (Original) A network switch according to claim 3 wherein said look-up engine in response to said second indication causes the provision of a final port bitmask for said packet.

5. (Original) A network switch according to claim 3 wherein said associated data includes a field indicating replication of the packet and wherein said network processor is operative to access said field and to control a replication process for the packet.

6-7. Cancelled.

8. (Currently Amended) A network switch for receiving data packets including header portions and for selectively forwarding said data packets, said switch comprising:

a register for receiving a header portion of a packet;

a look-up engine operative to obtain associated data in response to the header portion, wherein said associated data includes a ~~provisional~~ initial port bitmask; and

a network processor which is operative to perform a processing function in response to at least one of said header portion and said associated data, said network processor executing said processing function to cause modification of said ~~provisional~~initial port bitmask; and

wherein said look-up engine provides for said network processor a first indication, said first indication indicating that said associated data has been obtained; and

said network processor is operative to provide to said look-up engine a second indication, said second indication indicating that said modification has been performed, and

said look-up engine is operative after providing said first indication to wait for said second indication before performing any further operation on said packet.

9. (Original) A network switch according to claim 8 wherein said look-up engine in response to said second indication causes the provision of a final port bitmask for said packet.

10. (Original) A network switch according to claim 9 wherein said associated data includes a field indicating replication of the packet and wherein said network processor is operative to access said field and to control a replication process for the packet.

11. (Currently Amended) A method of operating a network switch for receiving data packets including header portions and for selectively forwarding said data packets, said method comprising:

receiving a header portion of a packet;

operating a look-up engine to obtain associated packet forwarding data in response to the header portion, said forwarding data including a ~~provisional~~ initial port bitmask;

providing from said look-up engine to said network processor a first indication, said first indication indicating that said associated packet forwarding data has been obtained;

executing a processing function by means of a network processor in response to at least one of said header portion and said associated packet forwarding data, said processing function including modification of said ~~provisional~~ initial port bitmask;

operating said network processor in response to said first indication to cause said modification of said associated packet forwarding data;

providing to said look-up engine a second indication, said second indication indicating that said modification has been performed;

delaying any further operation of said look-up engine in relation to said packet until said second indication is received by said look-up engine; and

in response to said second indication providing by means of said look-up engine a final port bitmask for said packet.

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12. Cancelled.